

jc931 U.S. PRO
09/698705



10/27/00

In re Application of Brigitte Devaux et al. Serial No.: To be assigned Filed: October 27, 2000 For: Anti-Tumor Antibody Compositions and Methods of Use	Group Art Unit: To be assigned Examiner: To be assigned
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Box Patent Applications
Assistant Commissioner of Patents
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I hereby state that the Sequence Listing submitted herewith is submitted in paper copy and a computer-readable diskette, and that the information recorded in computer readable form is identical to the written sequence listing.

Date: October 27, 2000

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Sequence Listing

<110> Devaux, B.
Keller, G.
Koeppen, H.
Lasky, L.

<120> Anti-Tumor Antibody Compositions and Methods of Use

<130> P1777R1

<141> 2000-10-27

<150> US 60/162,558

<151> 1999-10-29

<150> US 60/182,872

<151> 2000-02-16

<160> 25

<210> 1

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1

Met	Lys	Ala	Val	Leu	Leu	Ala	Leu	Leu	Met	Ala	Gly	Leu	Ala	Leu
1				5					10					15

Gln	Pro	Gly	Thr	Ala	Leu	Leu	Cys	Tyr	Ser	Cys	Lys	Ala	Gln	Val
				20					25					30

Ser	Asn	Glu	Asp	Cys	Leu	Gln	Val	Glu	Asn	Cys	Thr	Gln	Leu	Gly
				35					40					45

Glu	Gln	Cys	Trp	Thr	Ala	Arg	Ile	Arg	Ala	Val	Gly	Leu	Leu	Thr
				50					55					60

Val	Ile	Ser	Lys	Gly	Cys	Ser	Leu	Asn	Cys	Val	Asp	Asp	Ser	Gln
				65					70					75

Asp	Tyr	Tyr	Val	Gly	Lys	Lys	Asn	Ile	Thr	Cys	Cys	Asp	Thr	Asp
				80					85					90

Leu	Cys	Asn	Ala	Ser	Gly	Ala	His	Ala	Leu	Gln	Pro	Ala	Ala	Ala
				95					100					105

Ile	Leu	Ala	Leu	Leu	Pro	Ala	Leu	Gly	Leu	Leu	Leu	Trp	Gly	Pro
				110					115					120

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Gly Gln Leu

<210> 2

<211> 372

<212> DNA

<213> Homo sapiens

<400> 2

atg aag gct gtg ctg ctt gcc ctg ttg atg gca ggc 36
Met Lys Ala Val Leu Leu Ala Leu Leu Met Ala Gly
1 5 10

ttg gcc ctg cag cca ggc act gcc ctg ctg tgc tac tcc 75
Leu Ala Leu Gln Pro Gly Thr Ala Leu Leu Cys Tyr Ser
15 20 25

tgc aaa gcc cag gtg agc aac gag gac tgc ctg cag gtg 114
Cys Lys Ala Gln Val Ser Asn Glu Asp Cys Leu Gln Val
30 35

gag aac tgc acc cag ctg ggg gag cag tgc tgg acc gcg 153
Glu Asn Cys Thr Gln Leu Gly Glu Gln Cys Trp Thr Ala
40 45 50

cgc atc cgc gca gtt ggc ctc ctg acc gtc atc agc aaa 192
Arg Ile Arg Ala Val Gly Leu Leu Thr Val Ile Ser Lys
55 60

ggc tgc agc ttg aac tgc gtg gat gac tca cag gac tac 231
Gly Cys Ser Leu Asn Cys Val Asp Asp Ser Gln Asp Tyr
65 70 75

tac gtg ggc aag aag aac atc acg tgc tgt gac acc gac 270
Tyr Val Gly Lys Lys Asn Ile Thr Cys Cys Asp Thr Asp
80 85 90

ttg tgc aac gcc agc ggg gcc cat gcc ctg cag ccg gct 309
Leu Cys Asn Ala Ser Gly Ala His Ala Leu Gln Pro Ala
95 100

gcc gcc atc ctt gcg ctg ctc cct gca ctc ggc ctg ctg 348
Ala Ala Ile Leu Ala Leu Leu Pro Ala Leu Gly Leu Leu
105 110 115

ctc tgg gga ccc ggc cag cta tag 372
Leu Trp Gly Pro Gly Gln Leu Xaa
120 124

<210> 3

<211> 96

<212> PRT
<213> Mus musculus

<400> 3
Ser Val Ser Ile Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser
1 5 10 15
Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Leu Gln Arg Pro Gly Gln
20 25 30
Ser Pro Gln Leu Leu Ile Tyr Arg Met Ser Asn Leu Ala Ser Gly
35 40 45
Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Val Phe Thr
50 55 60
Leu Arg Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr
65 70 75
Cys Met Gln His Leu Glu Ser Pro Phe Thr Phe Gly Ser Gly Thr
80 85 90
Lys Leu Glu Ile Lys Arg
95

<210> 4
<211> 115
<212> PRT
<213> Mus Musculus

<220>
<221> unsure
<222> 46-48, 50-52
<223> unknown amino acid

<400> 4
Glu Leu Val Lys Pro Gly Ala Pro Val Lys Leu Ser Cys Lys Ala
1 5 10 15
Ser Gly Tyr Thr Phe Thr Asn Tyr Trp Met Asn Trp Val Lys Gln
20 25 30
Arg Pro Gly Arg Gly Leu Glu Trp Ile Gly Arg Ile Asp Pro Ser
35 40 45
Xaa Xaa Xaa Thr Xaa Xaa Xaa Gln Thr Phe Lys Asp Lys Ala Thr
50 55 60
Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr Ile Gln Leu Ser
65 70 75

Asn Tyr Trp Leu Asn Trp Val Lys Gln Arg Pro Gly Arg Gly Leu
 35 40 45

Glu Trp Ile Gly Arg Ile Asp Pro Ser Asp Ser Glu Ile His Tyr
 50 55 60

Asp Gln Lys Phe Lys Asp Lys Ala Thr Leu Thr Val Asp Lys Ser
 65 70 75

Ser Ser Thr Ala Tyr Ile Gln Leu Ser Ser Leu Thr Ser Glu Asp
 80 85 90

Ser Ala Val Tyr Tyr Cys Ala Leu Thr Gly Ile Tyr Ala Met Ala
 95 100 105

Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Ala Lys Thr
 110 115 120

Thr Gly Pro Ser

<210> 7

<211> 113

<212> PRT

<213> Mus musculus

<400> 7

Asp Val Val Met Thr Gln Thr Pro Leu Thr Leu Ser Val Thr Ile
 1 5 10 15

Gly Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu
 20 25 30

Asp Ser Asp Gly Lys Thr Tyr Leu Asn Trp Leu Leu Gln Arg Pro
 35 40 45

Gly Gln Ser Pro Lys Arg Leu Ile Tyr Leu Val Ser Thr Leu Asp
 50 55 60

Ser Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp
 65 70 75

Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val
 80 85 90

Tyr Tyr Cys Trp Gln Gly Thr His Phe Pro Arg Thr Phe Gly Gly
 95 100 105

Gly Thr Lys Leu Glu Ile Lys Arg
 110

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<210> 8
 <211> 121
 <212> PRT
 <213> Mus musculus

<400> 8
 Glu Val Gln Leu Gln Gln Ser Gly Pro Asp Leu Glu Lys Pro Gly
 1 5 10 15
 Ala Ser Val Lys Ile Ser Cys Lys Pro Ser Gly Asn Ser Phe Thr
 20 25 30
 Gly Tyr Tyr Ile His Trp Val Lys Gln Ser His Gly Lys Ser Leu
 35 40 45
 Glu Trp Ile Gly Arg Val Asp Pro Asn Asn Gly Phe Thr Ser Tyr
 50 55 60
 Asn Gln Lys Phe Lys Gly Lys Ala Ile Leu Thr Val Asp Lys Ser
 65 70 75
 Ser Ser Thr Ala Tyr Met Glu Leu Arg Ser Leu Thr Ser Glu Asp
 80 85 90
 Ser Ala Val Tyr Tyr Cys Val Gly Asn Phe Phe Asp Ser Trp Gly
 95 100 105
 Gln Gly Thr Thr Leu Thr Val Ser Ser Ala Lys Thr Thr Gly Pro
 110 115 120
 Ser

<210> 9
 <211> 118
 <212> PRT
 <213> Mus musculus

<400> 9
 Pro Gly Ala Glu Leu Val Lys Pro Gly Ala Pro Val Lys Leu Ser
 1 5 10 15
 Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr Trp Met Asn Trp
 20 25 30
 Val Lys Gln Arg Pro Gly Arg Gly Leu Glu Trp Ile Gly Arg Ile
 35 40 45
 Asp Pro Ser Asp Ser Glu Thr Gln Tyr Asn Gln Thr Phe Lys Asp
 50 55 60

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Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro
				155					160					165
Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser
				170					175					180
Gly	Asn	Ser	Gln	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser
				185					190					195
Thr	Tyr	Ser	Leu	Ser	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr
				200					205					210
Glu	Lys	His	Lys	Val	Tyr	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu
				215					220					225
Ser	Ser	Pro	Val	Thr	Lys	Ser	Phe	Asn	Arg	Gly	Glu	Cys		
				230					235					

<210> 11
 <211> 466
 <212> PRT
 <213> Artificial sequence

<220>
 <223> sequence is chimeric mouse/human

<400> 11

Met	Gly	Trp	Ser	Cys	Ile	Ile	Leu	Phe	Leu	Val	Ala	Thr	Ala	Thr
1				5					10					15
Gly	Val	His	Ser	Gln	Val	Gln	Val	Gln	Gln	Pro	Gly	Ala	Glu	Leu
				20					25					30
Val	Lys	Pro	Gly	Ala	Pro	Val	Lys	Leu	Ser	Cys	Lys	Ala	Ser	Gly
				35					40					45
Tyr	Thr	Phe	Thr	Asn	Tyr	Trp	Leu	Asn	Trp	Val	Lys	Gln	Arg	Pro
				50					55					60
Gly	Arg	Gly	Leu	Glu	Trp	Ile	Gly	Arg	Ile	Asp	Pro	Ser	Asp	Ser
				65					70					75
Glu	Ile	His	Tyr	Asp	Gln	Lys	Phe	Lys	Asp	Lys	Ala	Thr	Leu	Thr
				80					85					90
Val	Asp	Lys	Ser	Ser	Ser	Thr	Ala	Tyr	Ile	Gln	Leu	Ser	Ser	Leu
				95					100					105
Thr	Ser	Glu	Asp	Ser	Ala	Val	Tyr	Tyr	Cys	Ala	Leu	Thr	Gly	Ile
				110					115					120

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[illegible]

Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
380 385 390

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
395 400 405

Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
410 415 420

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg
425 430 435

Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala
440 445 450

Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
455 460 465

Lys

<210> 12

<211> 218

<212> PRT

<213> Artificial sequence

<220>

<223> sequence is chimeric mouse/human

<400> 12

Asp Val Val Met Thr Gln Thr Pro Leu Thr Leu Ser Val Thr Ile
1 5 10 15

Gly Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu
20 25 30

Asp Ser Asp Gly Lys Thr Tyr Leu Asn Trp Leu Leu Gln Arg Pro
35 40 45

Gly Gln Ser Pro Lys Arg Leu Ile Tyr Leu Val Ser Thr Leu Asp
50 55 60

Ser Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp
65 70 75

Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val
80 85 90

Tyr Tyr Cys Trp Gln Gly Thr His Phe Pro Arg Thr Phe Gly Gly
95 100 105

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00420T"50286960

Gly Thr Lys Leu Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val
110 115 120

Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala
125 130 135

Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys
140 145 150

Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
155 160 165

Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu
170 175 180

Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys
185 190 195

Val Tyr Ala Cys Glu Thr His Gln Gly Leu Ser Ser Pro Val Thr
200 205 210

Lys Ser Phe Asn Arg Gly Glu Cys
215

<210> 13

<211> 222

<212> PRT

<213> Artificial sequence

<220>

<223> sequence is chimeric mouse/human

<400> 13

Glu Val Gln Leu Gln Gln Ser Gly Pro Asp Leu Glu Lys Pro Gly
1 5 10 15

Ala Ser Val Lys Ile Ser Cys Lys Pro Ser Gly Asn Ser Phe Thr
20 25 30

Gly Tyr Tyr Ile His Trp Val Lys Gln Ser His Gly Lys Ser Leu
35 40 45

Glu Trp Ile Gly Arg Val Asp Pro Asn Asn Gly Phe Thr Ser Tyr
50 55 60

Asn Gln Lys Phe Lys Gly Lys Ala Ile Leu Thr Val Asp Lys Ser
65 70 75

Ser Ser Thr Ala Tyr Met Glu Leu Arg Ser Leu Thr Ser Glu Asp
80 85 90

Ser Ala Val Tyr Tyr Cys Val Gly Asn Phe Phe Asp Ser Trp Gly
 95 100 105

Gln Gly Thr Thr Leu Thr Val Ser Ser Ala Lys Thr Thr Gly Pro
 110 115 120

Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly
 125 130 135

Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro
 140 145 150

Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His
 155 160 165

Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
 170 175 180

Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr
 185 190 195

Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 200 205 210

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr
 215 220

<210> 14
 <211> 20
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> Sequence is a primer

 <400> 14
 aaggctgtgc tgcttgccct 20

 <210> 15
 <211> 20
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> Sequence is a primer

 <400> 15
 gaggcgcaca aaggcctggg 20

 <210> 16
 <211> 372

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<400> 16

ttg	gcc	ctg	cag	cca	ggc	act	gcc	ctg	ctg	tgc	tac	tcc	75
Leu	Ala	Leu	Gln	Pro	Gly	Thr	Ala	Leu	Leu	Cys	Tyr	Ser	
		15					20					25	

tgc aag gcc cag gtg agc aac gag gac tgc ctg aat gtg 114
Cys Lys Ala Gln Val Ser Asn Glu Asp Cys Leu Asn Val
30 35

gag aac tgc acg cag ccg gag gag cag tgc tgg acc gag 153
Glu Asn Cys Thr Gln Pro Glu Glu Gln Cys Trp Thr Glu
40 45 50

cgc atc cgc gcc gtg ggc ctc ctg acc gtc atc agc aaa 192
 Arg Ile Arg Ala Val Gly Leu Leu Thr Val Ile Ser Lys
 55 60

ggc tgc agc tca aac tgc gtg gat gac tca cag gac tac 231
Gly Cys Ser Ser Asn Cys Val Asp Asp Ser Gln Asp Tyr
65 70 75

tac gtg ggc aag aag aac atc acc tgc tgt gac acc gac 270
Tyr Val Gly Lys Lys Asn Ile Thr Cys Cys Asp Thr Asp
80 85 90

ttg tgc aac gcc agc ggg gcc cat gca ctg cag ccg gct 309
Leu Cys Asn Ala Ser Gly Ala His Ala Leu Gln Pro Ala
95 100

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gct gcc atc ctg gca ctg ctc cct gca ctc agt ctg ctg 348
Ala Ala Ile Leu Ala Leu Leu Pro Ala Leu Ser Leu Leu
      105              110              115
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ctt tgg agc ccc aga cag ctg t ag 372
Leu Trp Ser Pro Arg Gln Leu
120 123

<211> 123

<213> Macaca fascicularis

<400> 17

Met Lys Ala Val Leu Leu Ala Leu Leu Met Ala Gly Leu Ala Leu

1	5	10	15
Gln Pro Gly Thr Ala Leu Leu Cys Tyr Ser Cys Lys Ala Gln Val			
	20	25	30
Ser Asn Glu Asp Cys Leu Asn Val Glu Asn Cys Thr Gln Pro Glu			
	35	40	45
Glu Gln Cys Trp Thr Glu Arg Ile Arg Ala Val Gly Leu Leu Thr			
	50	55	60
Val Ile Ser Lys Gly Cys Ser Ser Asn Cys Val Asp Asp Ser Gln			
	65	70	75
Asp Tyr Tyr Val Gly Lys Lys Asn Ile Thr Cys Cys Asp Thr Asp			
	80	85	90
Leu Cys Asn Ala Ser Gly Ala His Ala Leu Gln Pro Ala Ala Ala			
	95	100	105
Ile Leu Ala Leu Leu Pro Ala Leu Ser Leu Leu Leu Trp Ser Pro			
	110	115	120
Arg Gln Leu			

<210> 18
 <211> 372
 <212> DNA
 <213> Macaca fascicularis

<400> 18
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 Met Lys Ala Val Leu Leu Ala Leu Leu Met Ala Gly
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 ttg gcc ctg cag cca ggc act gcc ctg ttg tgc tac tcc 75
 Leu Ala Leu Gln Pro Gly Thr Ala Leu Leu Cys Tyr Ser
 15 20 25
 tgc aag gcc cag gtg agc aac gag gac tgc ctg aat gtg 114
 Cys Lys Ala Gln Val Ser Asn Glu Asp Cys Leu Asn Val
 30 35
 gag aac tgc acg cag ccg gag gag cag tgc tgg acc gag 153
 Glu Asn Cys Thr Gln Pro Glu Glu Gln Cys Trp Thr Glu
 40 45 50
 cgc atc cgc gcc gtg ggc ctc ctg acc gtc atc agc aaa 192
 Arg Ile Arg Ala Val Gly Leu Leu Thr Val Ile Ser Lys
 55 60

ggc tgc agc tca aac tgc gtg gat gac tca cag gac tac 231
 Gly Cys Ser Ser Asn Cys Val Asp Asp Ser Gln Asp Tyr
 65 70 75

tac gtg ggc aag aag aac atc acc tgc tgt gac acc gac 270
 Tyr Val Gly Lys Lys Asn Ile Thr Cys Cys Asp Thr Asp
 80 85 90

ttg tgc aac gcc agc ggg gcc cat gcc ctg cag cca gct 309
 Leu Cys Asn Ala Ser Gly Ala His Ala Leu Gln Pro Ala
 95 100

gct gcc atc ctg gca ctg ctc cct gca ctc agc ctg ctg 348
 Ala Ala Ile Leu Ala Leu Leu Pro Ala Leu Ser Leu Leu
 105 110 115

ctt tgg ggc ccc aga cag ctg t ag 372
 Leu Trp Gly Pro Arg Gln Leu
 120 123

<210> 19
 <211> 123
 <212> PRT
 <213> Macaca fascicularis

<400> 19
 Met Lys Ala Val Leu Leu Ala Leu Leu Met Ala Gly Leu Ala Leu
 1 5 10 15
 Gln Pro Gly Thr Ala Leu Leu Cys Tyr Ser Cys Lys Ala Gln Val
 20 25 30
 Ser Asn Glu Asp Cys Leu Asn Val Glu Asn Cys Thr Gln Pro Glu
 35 40 45
 Glu Gln Cys Trp Thr Glu Arg Ile Arg Ala Val Gly Leu Leu Thr
 50 55 60
 Val Ile Ser Lys Gly Cys Ser Ser Asn Cys Val Asp Asp Ser Gln
 65 70 75
 Asp Tyr Tyr Val Gly Lys Lys Asn Ile Thr Cys Cys Asp Thr Asp
 80 85 90
 Leu Cys Asn Ala Ser Gly Ala His Ala Leu Gln Pro Ala Ala Ala
 95 100 105
 Ile Leu Ala Leu Leu Pro Ala Leu Ser Leu Leu Leu Trp Gly Pro
 110 115 120

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Arg Gln Leu

<210> 20
<211> 35
<212> DNA
<213> Artificial sequence

<220>
<223> Sequence is a primer

<400> 20
actatgaagc ttgcagctc atcccttcac aatcg 35

<210> 21
<211> 42
<212> DNA
<213> Artificial sequence

<220>
<223> Sequence is a primer

<400> 21
gaattcggat ccaccatgaa gaccgtcttc tttctcctgc tg 42

<210> 22
<211> 17
<212> DNA
<213> Artificial sequence

<220>
<223> Sequence is a PCR primer

<400> 22
cctgctggcc acctact 17

<210> 23
<211> 18
<212> DNA
<213> Artificial sequence

<220>
<223> Sequence is a primer

<400> 23
ccttcacaat cgggctat 18

<210> 24
<211> 20
<212> DNA
<213> Artificial sequence

<220>

<223> Sequence is a PCR primer

<400> 24

acccacgcgt ccggctgctt 20

<210> 25

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> Sequence is a PCR primer

<400> 25

cgggggacac cacggaccag a 21

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